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HOME ECONOMICS

HOUSEHOLD CALENDAR

A radio talk by Mrs. Rowena Schmidt Carpenter, Bureau of Home Economics, delivered through WRC and 42 other radio stations associated with the National Broadcasting Company, Thursday, June 4, 1931.

How do you do, Homemakers!

Here it is summer, and your questions about refrigerators have not been answered. I've saved them up so all of you can hear the answers at once. Some of you want to know how to select a good ice box; some of you ask about mechanical refrigerators. And still others want to know what temperature is required to keep food properly because you want to check up on the box you have.

Let's begin with this question of temperature, because the answer to it concerns all of you, whether you are getting a new refrigerator or studying the efficiency of the one you have. Temperature is an important consideration, since the reason for having a refrigerator at all is to preserve perishable food by keeping it sufficiently cool. When you ask us what temperature is best for keeping food well, we have to say that the answer depends upon the food, because some foods need to be cooler than others. It depends, also, upon the place in the box where you are recording the temperature since all parts of even the best refrigerator are not equally cool, as you well know. They can't be, and they need not be. A good box is designed for free and thorough circulation of cold air. The current of air passes over the ice or the mechanical cooling unit to be chilled, and then passes over the food to cool it. And the air is coldest just where it comes from the ice or cooling unit. Foods that must be kept especially cold (for instance milk and milk dishes, butter, and meat broth) are stored in that very coldest portion, which is usually described as the milk compartment. By the way, if you are getting a new box, be sure that the milk compartment is at least ten inches tall so that quart milk bottles can stand upright in it. And as for temperature, this coldest part of the box should be 45° F. or a little less. The next coldest place is near the milk section. It is best for the storage of uncooked meat and poultry and covered jars of salad materials, and may be two degrees or so warmer. The space for the storage of berries, eggs, and most cooked foods should hold a temperature of between 48° and 50° F., while raw fruits and vegetables stored in the warmest part of the box may well be kept at 52° F., or even a little higher. The sum total of this temperature story is that no part of the box should be warmer than 55° F. if your refrigerator is at all efficient, and the coldest part should certainly be as low as 45° F. We feel that the average of the temperatures in the various food compartments should be not higher than 50° F.

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Unfortunately you cannot find out for yourself about temperatures or about certain points in construction until you have the refrigerator at home to test, so you must take the dealer's word for a good many facts in making your selection. This is the reason it is very important to buy from a reliable dealer, who has in turn dealt with a reliable manufacturer. Find out all you can about the refrigerator before purchasing it. You may be able to get facts about temperatures that have been taken under test conditions, and also facts about the cost of ice or current or fuel to keep the box as cold as it should be.

Ask about the construction of the cabinet. A well insulated and well constructed box, perhaps a little more expensive in the beginning, is an economy in the end because it keeps food cold and preserves it well, and also because the efficiency of such a box holds up. The insulation remains dry and effective, and the cost of operating is low, and remains low.

In considering insulation, both the kind and amount are important. The insulation of the box tends to keep the outside heat from leaking in through the walls, and it must therefore be made of some material that is a poor conductor of heat. Furthermore, the insulation must be a poor absorber of moisture or else it must be wrapped with a moisture proof material, so that the water vapor condensing as the air cools does not soak into the insulation and destroy its effectiveness. Corkboard meets these requirements especially well, and for that reason we say that two inches of corkboard or its equivalent in a good insulating material should be built in the refrigerator between the inside lining and the outside walls. A thicker layer of a material less resistant to heat would be required. Some cabinets have a label that states the kind and amount of insulation. If there is no label, you have to rely upon the information the dealer has, and upon his integrity.

Other points to look for in good construction are the fit of the doors, the material and construction of the lining and shelves, and the shape and finish of the drain pipe. Well fitted doors should be equipped with small rubber strips called gaskets, and should have hardware of a type that keeps the doors tightly closed. All hardware should be of good quality, and non-corroding. Shelves should be strong, non-tarnishable, removable for cleaning, and placed far enough apart for convenient arrangement of food. It is very important that the lining of a refrigerator should have a smooth, hard finish, made if possible in one piece and with rounded corners so that there are no cracks or crevices in which food and moisture can accumulate and breed bacteria. Seams that cannot be avoided must be tightly fitted and welded to prevent moisture from the inside of the box getting into the insulation. A good drain pipe carries away the drip and has a water seal to prevent gases from backing up into the food space and cold air from leaking out. The drain should be so constructed and attached that it is easy to remove and clean.

For best results the refrigerator should be set level, and placed in as cool and protected a place as possible.

Most of these points apply both to ice cooled and mechanically cooled refrigerators. If you are selecting the latter kind, you must give some thought to a few additional requirements. I shall just mention them briefly: Quietness, dependability, and economical automatic operation are important qualities to inquire about. Find out, too, if water freezes and desserts chill and freeze in a reasonably short length of time; know that the mechanism is accessible for repairs, and that the exterior moving parts of the electrical apparatus or the burners of other machines are so placed or protected that they operate with safety. If possible, select a machine that will have the minimum wear of moving parts, and that requires a minimum of service for proper maintenance. But be sure that service is available to you at all times because of possible emergencies.

I have no bulletin to offer you today, but you may have a copy of the suggestions I have just made if you wish. Write to your station or to the United States Department of Agriculture in Washington for the radio talk on refrigerators. You may be interested in buying a set of six charts that show where to place food in the refrigerator, and give a number of facts about temperatures for food storage. The cost of the set of charts is 20 cents. Send money order or coin to the Superintendent of Documents, Government Printing Office, in Washington for the Household Refrigeration charts.

Goodbye, Homemakers, under June 25th!